

## TI 2515/171, APPENDIX C

### B.5.b SIGNIFICANCE DETERMINATION PROCESS

#### I OBJECTIVE

The objective of this SDP is to accommodate all potential greater than minor B.5.b inspection findings identified during the implementation of Temporary Instruction (TI) 2515/171 - VERIFICATION OF SITE SPECIFIC IMPLEMENTATION OF B.5.B PHASE 2 & 3 MITIGATING STRATEGIES. The TI's objective is to verify and confirm licensee's implementation of B.5.b mitigating strategies required by license conditions issued to existing commercial nuclear power reactors in July - August 2007. The strategies for each licensee were reviewed by the staff who issued a safety evaluation report (SER) to document the commitments to implement these strategies. The site specific responses delineating each licensee's commitment and the SERs are listed in Exhibit 1 of the TI.

#### II ENTRY CONDITIONS

Each issue entering the SDP process must first be screened to determine its documentation threshold (i.e. if more than minor in significance) using Inspection Manual Chapter (IMC) 0612, Appendix B, "Initial Screening." Issues screened as minor are not subjected to further SDP screening.

#### III DEFINITIONS

B.5.b event – a beyond design basis loss of a large area of a reactor plant due to fires or explosions initiated by a terrorist threat as stated in Attachment 2 to order EA-02-026.

Unrecoverable – an unavailable mitigating strategy is unrecoverable if licensee actions could neither reasonably correct nor compensate for the conditions creating the unavailability in time during a B.5.b event for the mitigating strategy to achieve its objective. The time limit is the time allowed by NEI 06-12 for establishment of the strategy where applicable, or a reasonable time.

Unavailability – a mitigating strategy is unavailable if its hardware or components are not functional and ready for intended use, or personnel training and procedures are inadequate, as described in the licensee submittal and SER supporting the B.5.b license condition.

Refer to the definitions listed in TI-2515/171 Appendix A – General Guidance and Definitions

## IV GUIDANCE

Record the performance deficiency and factually describe known observations associated with the deficiency in Table 1 - SDP Screening Worksheet for TI-2515/171. Evaluation of the listed attributes may be informative in determining the significance of the finding. Consider only attributes which relate directly to the significance of the finding and document the basis for the consideration. If Table 1 is used to document a performance deficiency and the factual description of the condition, the table will be properly labeled as Official Use Only – Security Related Information.

<b>TABLE 1 – SDP Screening Worksheet for TI-2515/171</b>	
<b>Inspection Report #</b>	
<b>Performance Deficiency</b> (concise statement clearly stating the deficient licensee performance)	
<b>Factual Description of Condition</b> (facts about the condition that resulted from the performance deficiency without hypothetical failures included)	
<b>Systems/Trains Degraded by Condition or Programmatic Weakness</b> (list the Hardware, Procedures or Training)	
<b>Extent of Condition</b> (describe what other strategies are directly affected by the deficiency)	
<b>Exposure Time</b> (Period of time the performance deficiency existed; and if opportunity to identify the finding during such period was missed (operating experience, licensee's programs such as surveillance testing))	
<b>Recovery</b> (The likelihood that the licensee's recovery actions would successfully mitigate the performance deficiency)	

The examples provided for each level of significance in Table 2 serve as guidance in determining the appropriate characterization for findings; however, they are neither exhaustive nor controlling. The characterization of each finding is dependent on the circumstances of the issue defined in Table 1. In addition, these examples do not create new requirements. Each is intended to illustrate the significance that the NRC places on a particular type of finding. Each potential finding must be considered on its own merits to ensure that its significance is characterized at the level best suited to the circumstances using qualitative engineering judgment and regulatory oversight experience in each case. This is necessary because the examples provided are intentionally limited to deter a mechanistic approach or unreasoned conclusion. With this in mind, the entire spectrum of characterizations should be considered with the particular finding placed in context in consideration of its particular circumstances. The appropriate cornerstone for a finding will be determined using table 2 of IMC 0609.04.

<b>TABLE 2 – Significance Characterization</b>	
<b>GREEN</b>	Unrecoverable unavailability of any individual mitigating strategy.
<b>WHITE</b>	<ol style="list-style-type: none"> <li>1. Unrecoverable unavailability of multiple mitigating strategies such that SFP cooling, injection to RPV, or injection to SGs cannot occur, or</li> <li>2. Unrecoverable unavailability of on-site, self powered, portable pumping capability, or</li> <li>3. Substantial inability to perform Command and Control Enhancements.</li> </ol>
	<p>Examples:</p> <ul style="list-style-type: none"> <li>- Unrecoverable unavailability of injection to the reactor vessel or steam generators (concurrent unavailability of low pressure pumping/depressurization strategies and unavailability of manual operation of RCIC/Isolation Condenser or turbine (or diesel) driven AFW)</li> <li>- Unrecoverable unavailability of SFP internal strategy, SFP external fill strategy, AND SFP external spray strategy</li> <li>- Substantial inability to perform Command and Control Enhancements</li> </ul>
<b>YELLOW</b>	<p>A failure to substantially establish mitigating strategies in one or more of the following overall mitigating strategies areas:</p> <ul style="list-style-type: none"> <li>- Fire fighting response strategies</li> <li>- Operations to mitigate reactor core fuel damage including command and control and actions to minimize release</li> <li>- Operations to mitigate Spent Fuel Pool fuel damage including command and control and actions to minimize release</li> </ul>
<b>RED</b>	<p>In an actual B.5.b event, a substantial failure of mitigating strategies to function as intended (i.e. achieve the strategies' objectives) in one or more of the following overall mitigating strategies areas:</p> <ul style="list-style-type: none"> <li>- Fire fighting response strategies</li> <li>- Operations to mitigate reactor core fuel damage including command and control and actions to minimize release</li> <li>- Operations to mitigate Spent Fuel Pool fuel damage including command and control and actions to minimize release</li> </ul>

ATTACHMENT 1

Revision History For TI 2515/171, Appendix C  
B5b Significance Determination Process

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	05/16/08 CN 08-015	Revision history reviewed for the last four years - no generic requirements incorporated during this period.	N/A	N/A	ML081200042